

Mologen Pain combating agent.ST25
SEQUENCE LISTING

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<120> Local Pain-Combating Agent

<130> NHL-NP-43

<150> DE 101 09 092.7
<151> 2001-02-24

<150> PCT/DE02/00583
<151> 2002-02-19

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<170> PatentIn version 3.1

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<212> DNA
<213> synthetic sequence

<220>
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<222> (446)..(532)
<223> β -endorphin cDNA sequence

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<222> (446)..(532)
<223> β -endorphin cDNA sequence

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gcttcagacc tccatagacg tgtggagctg gtgcctggag agcagccagt gccaggacct 180
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<222> (376)..(462)

<223> β -endorphin cDNA sequence

<220>

<221> Intron

<222> (475)..(562)

<223> second β -endorphin cDNA sequence

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<221> Intron

<222> (574)..(660)

<223> third β -endorphin cDNA sequence

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agcaacctgc tggcttgcatt cggggcctgc agactcgacc tctcggcgga gacgcccgtg 180

tttccaggca acggagatga acagcccttg actgaaaatc cccggaagta cgtcatgggt 240

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aggcgtgcgg aggaagagac ggcggggggaa gatggccgtc cggagccaag tccacggag 360

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aacgtgcaca agaagggcca gaagcgctac ggcggcttca tgacccctcgaa gaagagccag 600

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<210> 3

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<213> Rat

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aggcgtgcgg aggaagagac ggcggggggaa gatggccgtc cggagccaag tccacggag 360

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| | |
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| ggcaagcgct cctactccat ggagcacttc cgctggggca agccgggtggg caagaagcgg | 420 |
| cgcctgtga aggtgtaccc caatgtcgcc gagaacgagt cggccgaggc cttccctta | 480 |
| gagttcaaga gggagctgga aggcgagcag cctgatggct tggagcacgt cctggagccg | 540 |
| gataccgaga aggccgacgg gccctatcgg gtggagcact tccgctgggg caacccgccc | 600 |
| aaggacaagc gctacggcgg cttcatgacc tccgagaaga gccagacgcc cctggtgacg | 660 |
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| agcaacctgc tggcttgcatt ccggccctgc agactcgacc tctcggcgg gacgcccgtg | 180 |
| tttccaggca acggagatga acagcccttg actgaaaatc cccgaaagta cgtcatgggt | 240 |
| cacttccgct gggaccgctt cggcccgaga aacagcagca gtgctggcgg ctcagcgcag | 300 |
| aggcgtgcgg aggaagagac ggcgggggaa gatggccgtc cggagccaag tccacggag | 360 |
| ggcaagcgct cctactccat ggagcacttc cgctggggca agccgggtggg caagaagcgg | 420 |
| cgcctgtga aggtgtaccc caatgtcgcc gagaacgagt cggccgaggc cttccctta | 480 |
| gagttcaaga gggagctgga aggcgagcag cctgatggct tggagcacgt cctggagccg | 540 |
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 <211> 12
 <212> PRT
 <213> Simian virus 40

<400> 5

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<210> 6
 <211> 1195
 <212> DNA
 <213> Rattus norvegicus

<220>
 <221> misc_feature
 <223> CRF cDNA sequence

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 gaacaacagt gcgggctcac ctgccaaggg aggagaagag agcgccccta aacatgcggc 180
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<220>
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 <222> (376)..(462)
 <223> β -endorphin cDNA sequence

<220>
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 <222> (376)..(462)
 <223> first β -endorphin cDNA sequence

<220>
 <221> Intron
 <222> (475)..(562)

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<223> second β -endorphin cDNA sequence

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| tccatagacg | tgtggagctg | gtgcctggag | agcagccagt | gccaggacct | caccacggaa | 120 |
| agcaacctgc | tggcttgcac | ccgggcctgc | agactcgacc | tctcggcgga | gacgcccgtg | 180 |
| tttccaggca | acggagatga | acagcccttg | actgaaaatc | cccggaaagta | cgtcatgggt | 240 |
| cacttccgct | gggaccgcctt | cggcccggaa | aacagcagca | gtgctggcggt | ctcagcgcag | 300 |
| aggcgtgcgg | aggaagagac | ggcggggggaa | gatggccgtc | cgagccaaag | tccacggag | 360 |
| ggcaagcgct | acggcggctt | catgacacctcc | gagaagagcc | agacgcccct | ggtgacgcctc | 420 |
| ttcaagaacg | ccatcatcaa | gaacgtgcac | aagaagggcc | agaagcgcta | cggcggcttc | 480 |
| atgacctccg | agaagagcca | gacgcccctg | gtgacgctct | tcaagaacgc | catcatcaag | 540 |
| aacgtgcaca | agaagggcca | gtga | | | | 564 |

<210> 8

<211> 936

<212> DNA

<213> Homo sapiens

<220>

<221> Intron

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<223> β -endorphin cDNA sequence

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| tccatggaag | tgcgtggctg | gtgcctggag | agcagccagt | gtcaggacct | caccacggaa | 120 |
| agcaacctgc | tgaagggat | gggacaaaag | aggcggtggc | aagatcttag | atgcccacga | 180 |
| gtgccaagaa | agcaggtggg | cagacctgcc | tgttagggagg | cctcgacgct | tgacacgccc | 240 |
| gacactgtgc | cctgtgtcct | cggcgagtgc | atccgggcct | gcaagcccga | cctctcgggcc | 300 |
| gagactccca | tgttcccggg | aaatggcgac | gagcagccctc | tgaccgagaa | cccccggaag | 360 |
| tacgtcatgg | gccacttccg | ctgggaccga | ttcggccgccc | gcaacagcag | cagcagcggc | 420 |
| agcagcggcg | cagggcagaa | gcgcgaggac | gtctcagcgg | gcgaagactg | cggcccgctg | 480 |
| cctgagggcg | cccccgagcc | ccgcagcgt | ggtgccaagc | cgggccccgcg | cgagggcaag | 540 |
| cgctcctact | ccatggagca | cttccgctgg | ggcaagccgg | tgggcaagaa | cgggcgcccc | 600 |
| gtgaaggtgt | accctaacgg | cgccgaggac | gagtcggccg | aggccttccc | cctggagttc | 660 |
| aagagggagc | tgactggcca | gcgactccgg | gagggagatg | ccccgacgg | ccctgcccgt | 720 |
| gacggcgcag | gggcccaggc | cgacctggag | cacagcctgc | tggtggcggtc | cgagaagaag | 780 |

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atcaagaacg tgcacaagaa gggccag 87

<210> 10
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<213> Homo sapiens

<220>
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<223> β-end sequence

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atcaagaacg cctacaagaa gggcgag 87